

Fig. 1 PRIOR ART



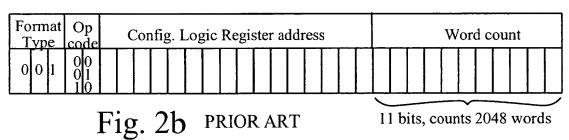
Bitstream header Config. Logic Reg. address	Config. Logic Register data contents	
0000	Cyclic Redundancy Check (CRC)	
0001	Frame Address	
0010	Frame Data Input	
0011	Frame Data Output	
0100	Command	
0110	Control	
0111	Status	
1000	Daisy Chain Output	
1001	Configuration Option	
1010	Reserved	
1011	Frame Length	
1100	Reserved	
1101	Reserved	
1110	Reserved	
1111	Reserved	

Header A Data A Header B Data 1B Data 2B Data 3B Data 4B Header C Data 1C

Fig. 2a PRIOR ART

Fig. 2d PRIOR ART

32-bit Command Header Format 1



32-bit Command Header Format 1

	32-01t Communication 1 off	illat I		
Format Op Type code	Config. Logic Register Address	Word Count		
0 0 1 00 1 10		0000000000000		
32-bit Command Header Format 2				

Format Op Type code		 Word Count	
$\begin{array}{c cccc} 0 & 1 & 0 & 0 & 0 \\ 1 & 0 & 0 & 1 & 1 & 0 \end{array}$			

27 bits, counts 2.68 million words or 10 megabytes
Fig. 2c PRIOR ART

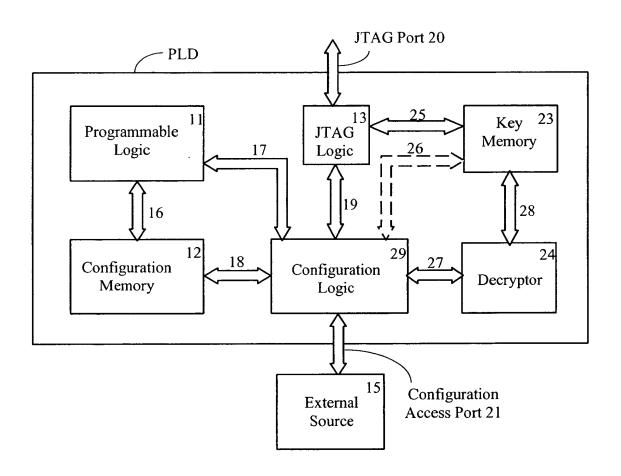


Fig. 3

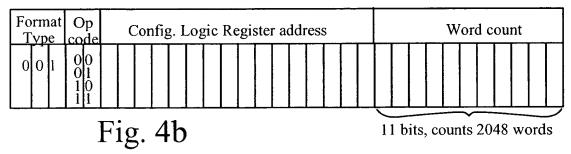
Header A	
Data A	
Header B	
Data B	
Header C	
Data C	
Header D	
Data 1D	
Data 1D	
Data 1D	
Data 1D/ Data 2D/	

Bitstream header	Config. Logic Register	
Config. Logic Reg.	data contents	
0000	Cyclic Redundancy Check (CRC)	
0001	Frame Address	
0010	Frame Data Input	
0011	Frame Data Output	
0100	Command	
0110	Control	
0111	Status	
1000	Daisy Chain Output	
1001	Configuration Option	
1010	Reserved	
1011	Frame Length	
1100	Cipher block chaining (CBC) starter	
1101	Initial key address	
1110	Reserved	
1111	Reserved	

Fig. 4a

Fig. 4d

32-bit Command Header Format 1



32-bit Command Header Format 1

Format Op Type code	Config. Logic Register Address	Word Count
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		

32-bit Command Header Format 2

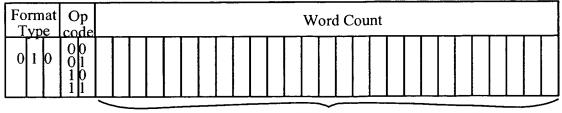


Fig. 4c

27 bits, counts 2.68 million words or 10 megabytes

UNENCRYPTED VERSION

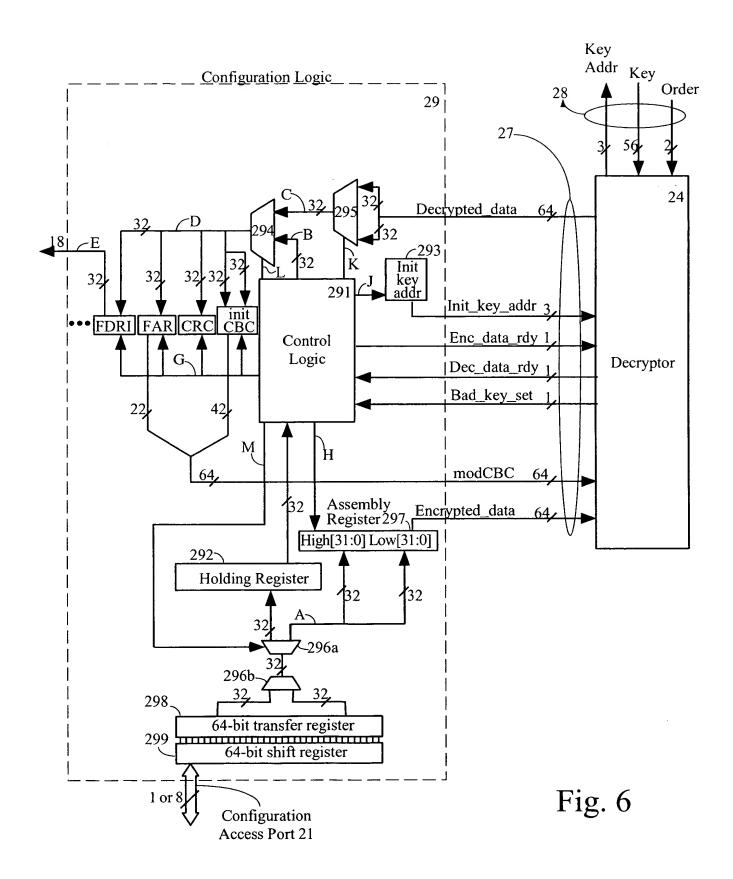
Sync word 10101010100110010101010101100110 00110000000000001000000000000001 Type 1 write 1 words to CMD RCRC command 0000000000000000000000000000111 Type 1 write 1 words to FLR 001100000000001011000000000001 Type 1 write 1 words to COR 001100000000001001000000000001 data word 0 000000000000011111111111000001 Type 1 write 1 words to ID 0011000000000011100000000000001 data word 0 0000000100000001000000010010011 Type 1 write 1 words to MASK 00110000000000011000000000001 Type 1 write 1 words to FAR 001100000000000001000000000001 Type 2 write 10530 words to FDRI 010100000000000001010010010010 data word 3 00001000000000111111111111111100

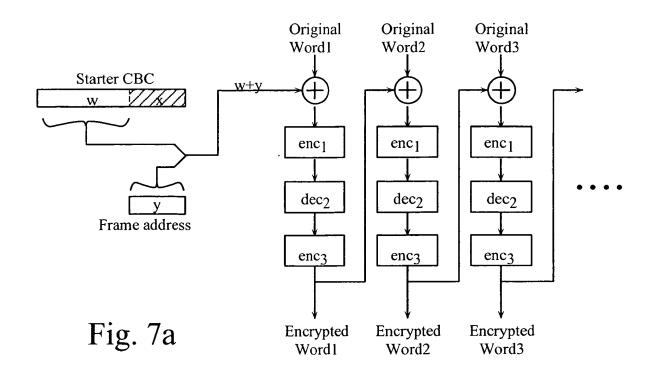
Fig. 5a

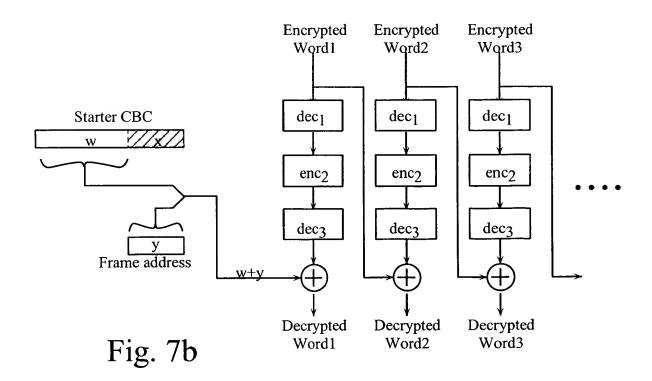
ENCRYPTED VERSION

```
Sync word 1010101010100101010101010101100110
 Type 1 write 1 words to CMD 00110000000000001000000000000001
           RCRC command 0000000000000000000000000000111
 Type 1 write 1 words to FLR
                    0011000000000001011000000000001
            data word 0 00000000000000000000000000011001
 Type 1 write 1 words to COR 001100000000001001000000000001
            data word 0 000000000000011111111111000001
 Type 1 write 1 words to ID
                    0011000000000011100000000000001
            data word 0 0000000100000001000000010010011
 Type 1 write 1 words to MASK 001100000000000110000000000001
            Type 1 write 1 words to FAR
                   001100000000000001000000000001
            Type 1 write 1 words to CMD 0011000000000001000000000000001
           Type 1 write 1 word to KEY ADDR 00110000000000110000000000001
            Type 1 write 2 words to CBC 001100000000001101000000000010
            data word 0 10010000101010111100110111101111
            data word 1 0001001000110100010110111000
Type 2 dec 10530 words to FDRI 010110000000000001010010010010
            data word 0 0001010111011011001100101001000
            data word 1 111000001110001101111111101100111
            data word 2 10101010011111011110001100110011
            data word 3 01100001101011100001011010110100
         data word 10526 010110011011111011000101010101010
         data word 10527 00101001010111111101011110110000
         data word 10528 11000000001010100110011000101010
         data word 10529 01111111110010000001100011100010
           Auto CRC word 00000000000000001011111011001010
 LFRM command 00000000000000000000000000000011
           Type 1 write 1 words to COR 001100000000001001000000000001
            data word 0 000000000000011111111111000001
 Type 1 write 1 words to CTL 001100000000000101000000000001
            data word 0 000000000000000000101111001111
 DESYNCH command 000000000000000000000000001101
```

Fig. 5b







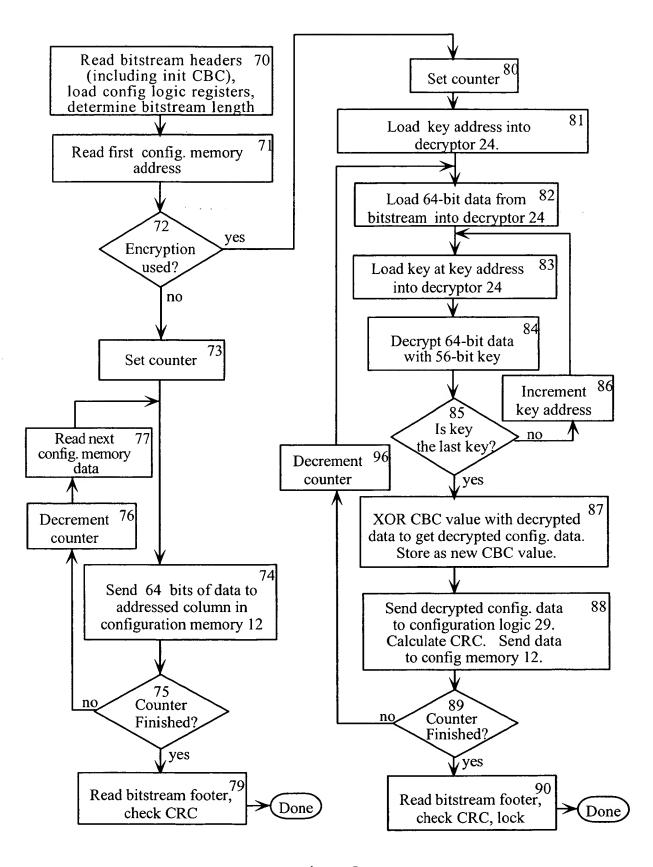


Fig. 8

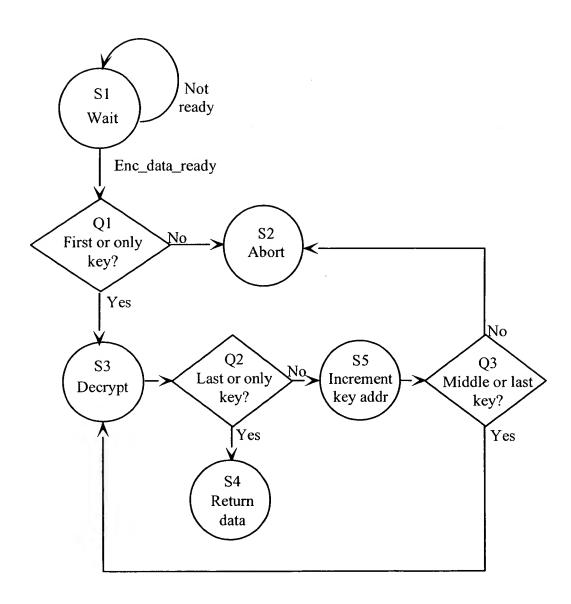
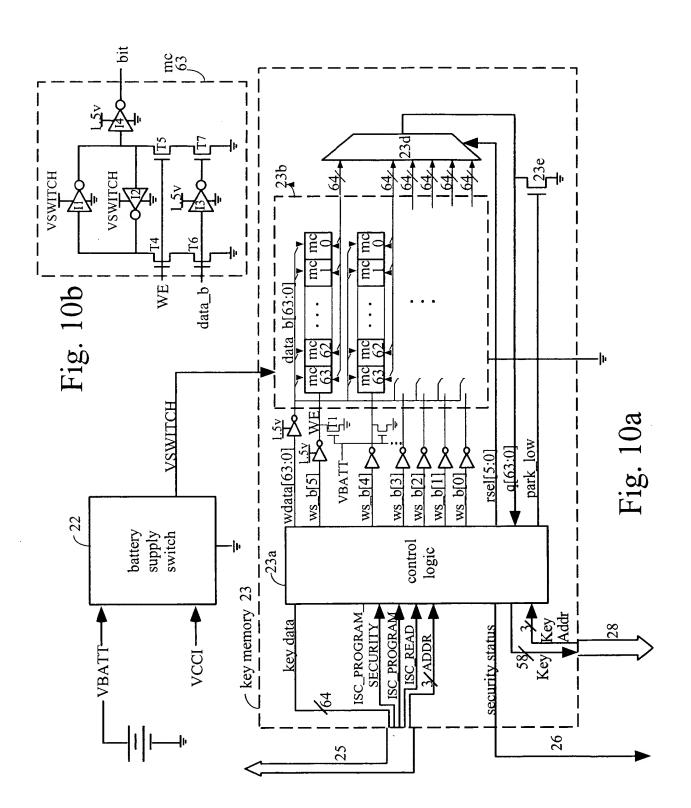
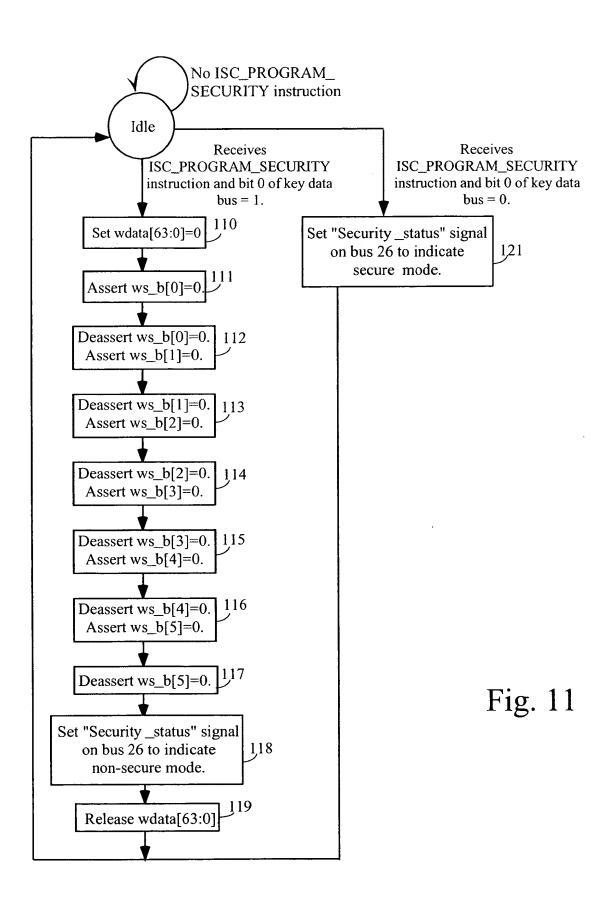


Fig. 9





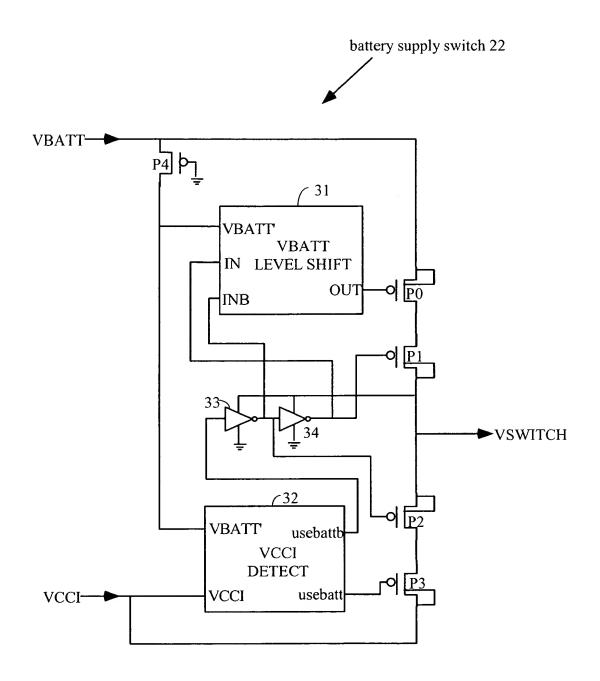
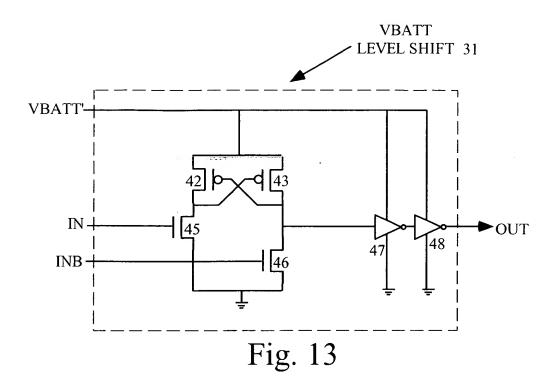
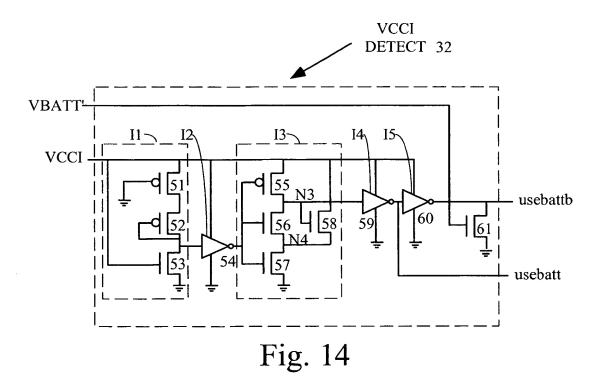


Fig. 12





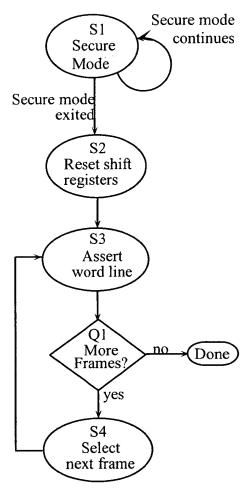


Fig. 15

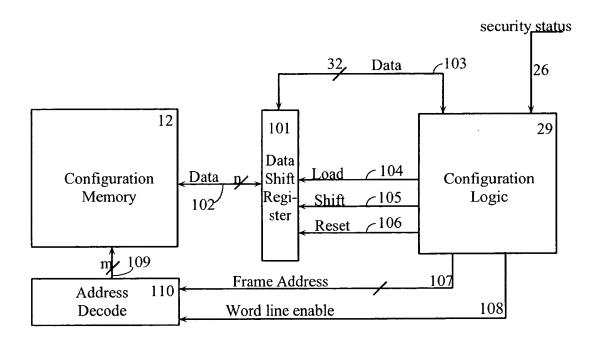


Fig. 16